

COMPUTING DIVISION C. AND G. SURVEY,
August 16, 1887.

MR. B. A. COLONNA,

Assistant in Charge Office and Topography:

DEAR SIR: I herewith submit the results for latitude at five stations on the Virginia and North Carolina boundary, viz.:

Dismal Swamp Canal boundary stone, Northwest Station, Knott's Island, Hines', and Nottoway River.

Date:—November, 1886, to March, 1887.

Observer:—C. H. Sinclair.

Instruments:—The zenith telescope No. 6. A new level was attached to the instrument, for which Asst. A. Braid found the value 1 div.=1.11'' at temperature 30° Fahr. on June 21, 1887, by means of the office level trier. The micrometer value was determined from observations on Ursa Minoris near western elongation, November 30th, 1886, viz.: 1 turn=76.190'' corrected for rate and refraction. There are two movable threads connected with the micrometer screw; their distance apart is stated to be thirty-six divisions; this value was adopted, in the absence of observations, whenever a pair of stars were observed on different threads.

Time was roughly determined from a few transits of stars (generally 3) noted by sidereal pocket chronometer Karr 1020.

Computation:—The field computation was made by the observer and the office computation by H. Farquhar, June and July, 1887. The same pairs of stars were observed in many instances at two or more stations, facilitating the computations and admitting of small corrections to the several latitude results.